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Fig. 1
CARRIER BORNE ENERGY SPECTRUM

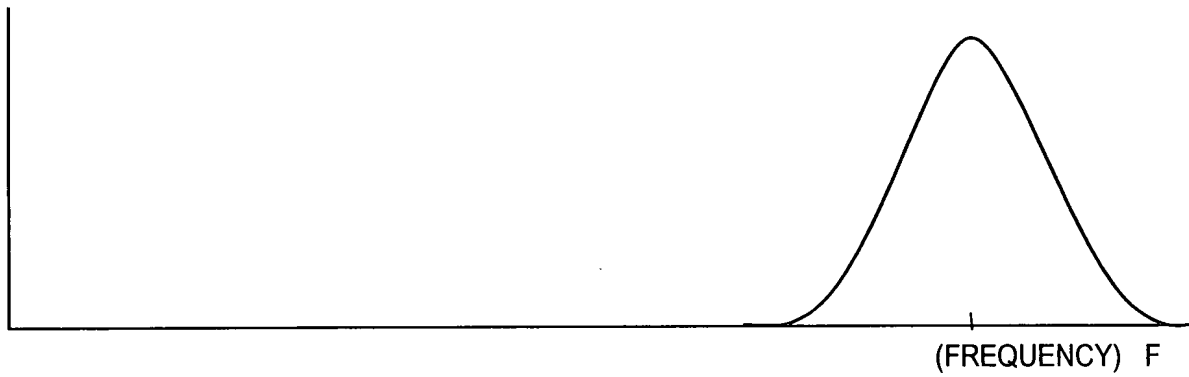
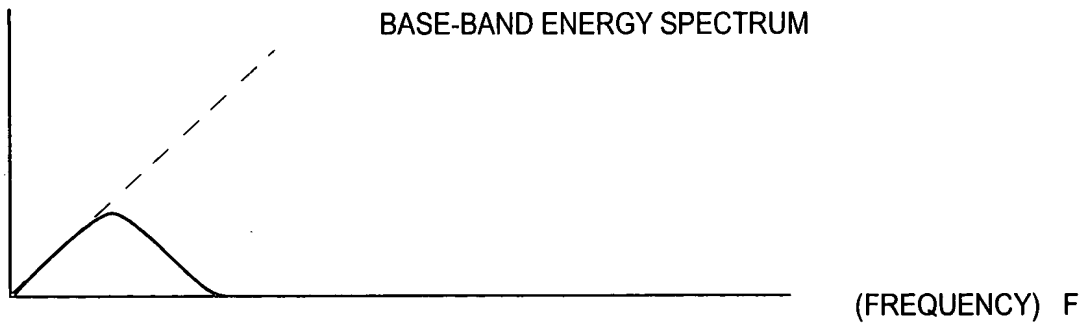


Fig. 2
SELF-DEMODULATED
BASE-BAND ENERGY SPECTRUM



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Fig. 3

RICKER WAVELET

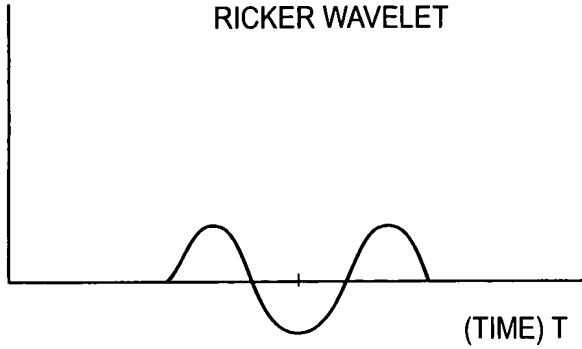


Fig. 4

GAUSSIAN WAVEFORM

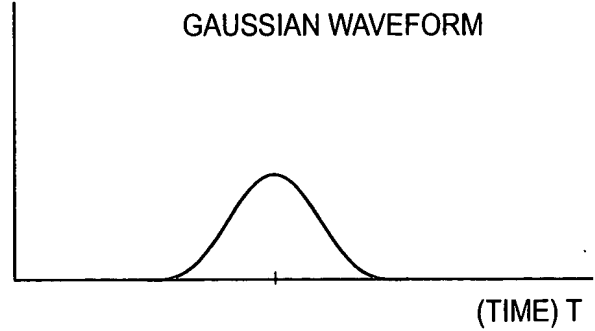


Fig. 6

SECOND DERIVATIVE OF
GAUSSIAN WAVEFORM
(QUASI-RICKER WAVELET)
WITH AIR GUN SIGNATURE
SUPERIMPOSED

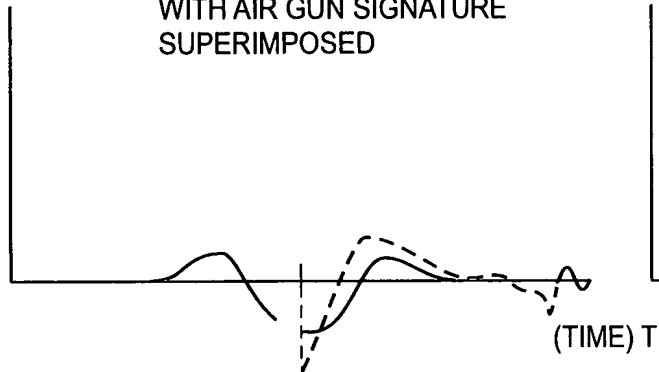


Fig. 5

FIRST DERIVATIVE
OF GASSIAN
WAVEFORM

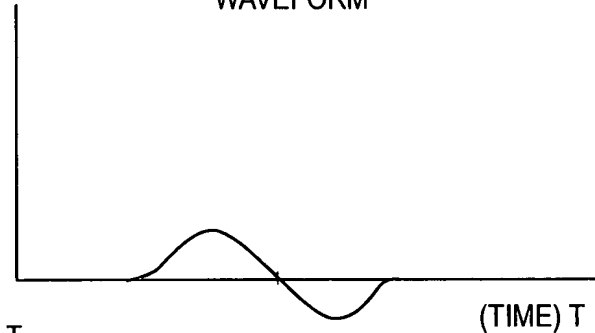
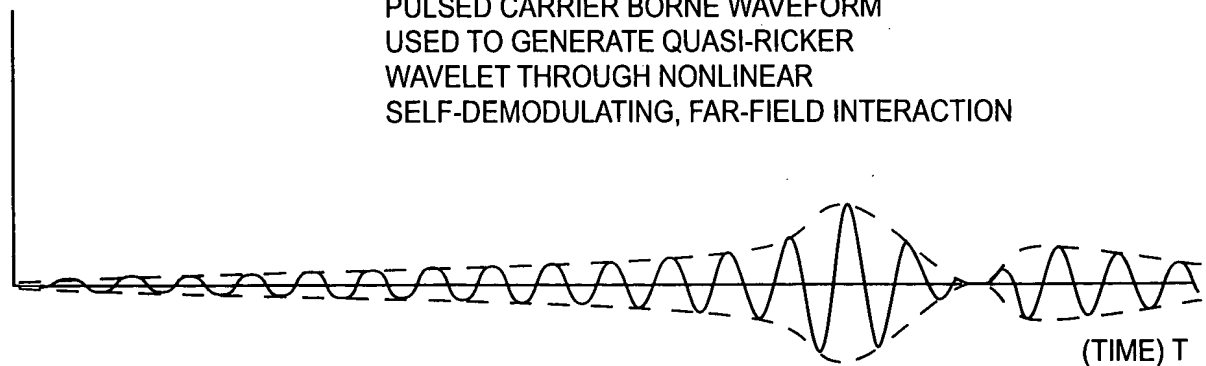


Fig. 7

PULSED CARRIER BORNE WAVEFORM
USED TO GENERATE QUASI-RICKER
WAVELET THROUGH NONLINEAR
SELF-DEMODULATING, FAR-FIELD INTERACTION



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Fig. 8

ENERGY SPECTRUM OF
RICKER WAVELET

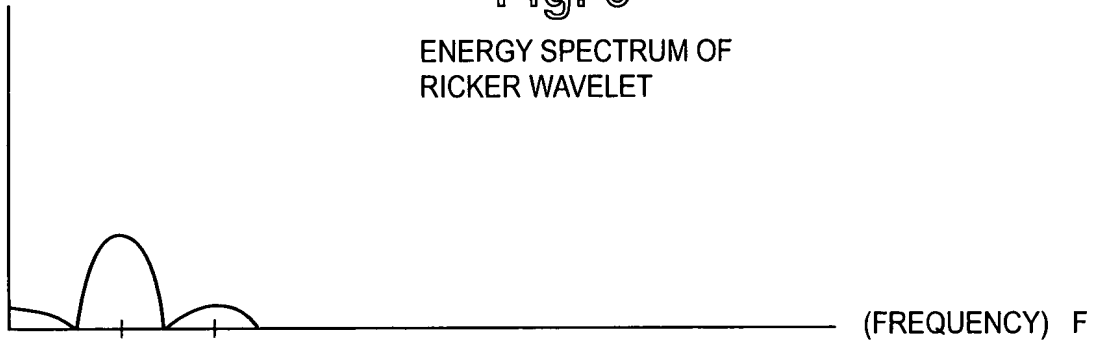


Fig. 9

ENERGY SPECTRUM OF
CARRIER-BORNE WAVEFORM
USED TO GENERATE
QUASI-RICKER WAVELET

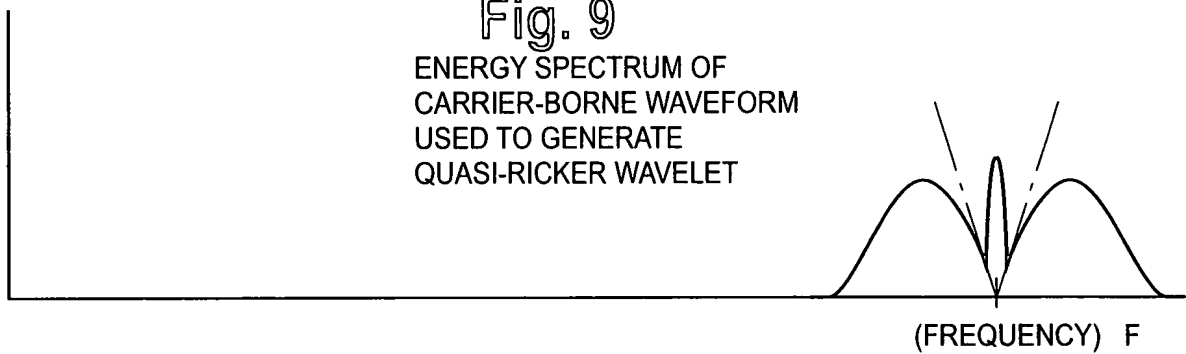
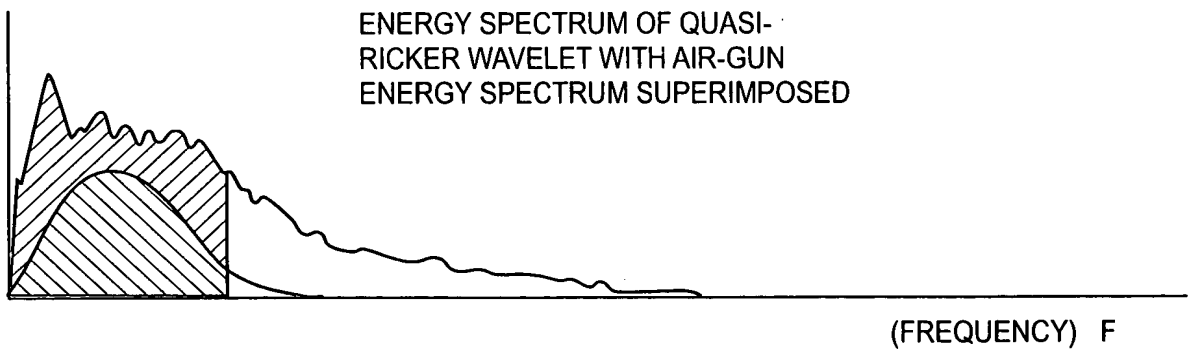


Fig. 10

ENERGY SPECTRUM OF QUASI-
RICKER WAVELET WITH AIR-GUN
ENERGY SPECTRUM SUPERIMPOSED



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Fig. 11

PREDISTORTED (I.E., FIRST-DERIVATIVE)
GAUSSIAN WAVEFORM PLUS DC OFFSET

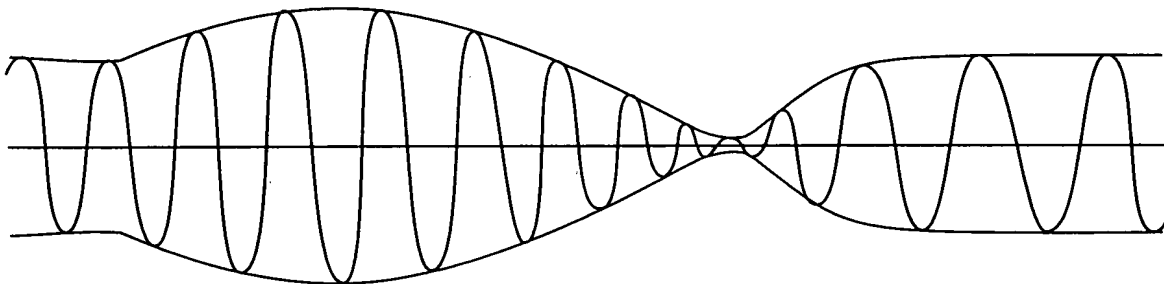


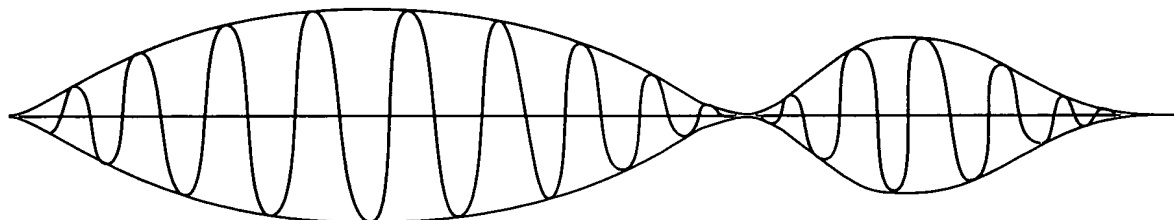
Fig. 12

TAPERED ENVELOPE
GATING FUNCTION



Fig. 13

COMPOSITE OF TAPERED GATING FUNCTION
AND PREDISTORTED GAUSSIAN WAVEFORM



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Fig. 14

TIME WAVEFORMS OF A QUASI-RICKER
WAVELET AND A RICKER WAVELET

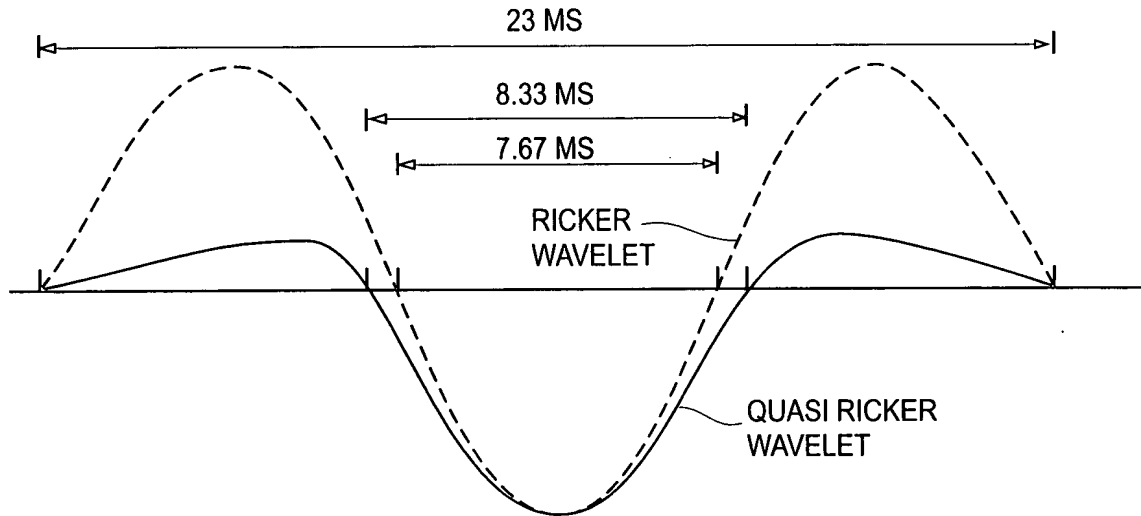
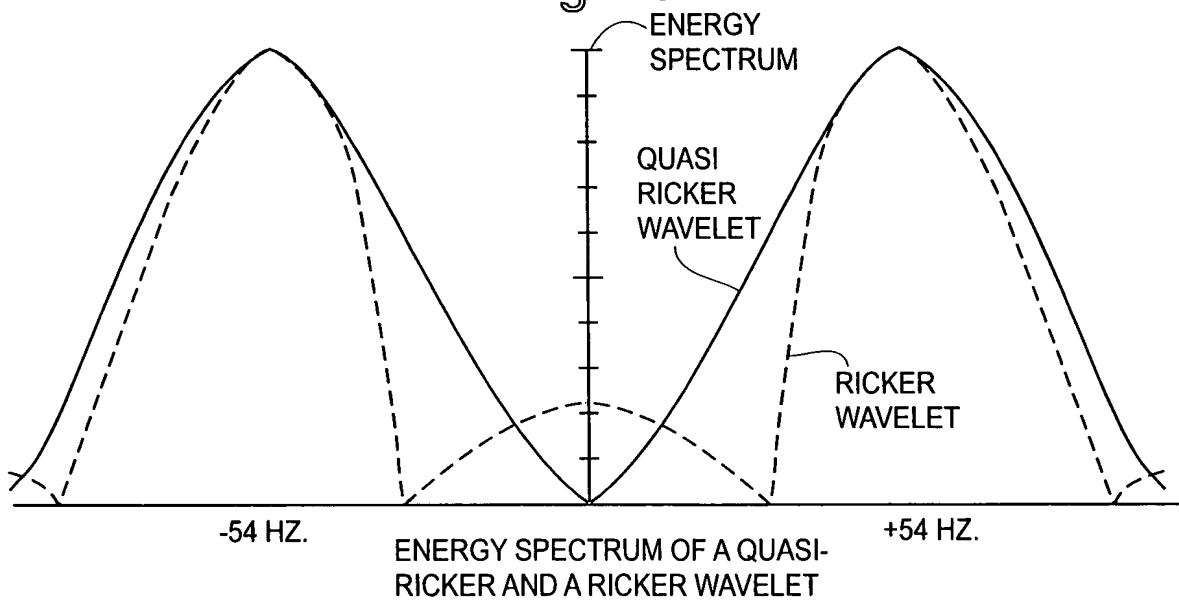


Fig. 15



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Fig. 16

TRANSMITTED WAVEFORM

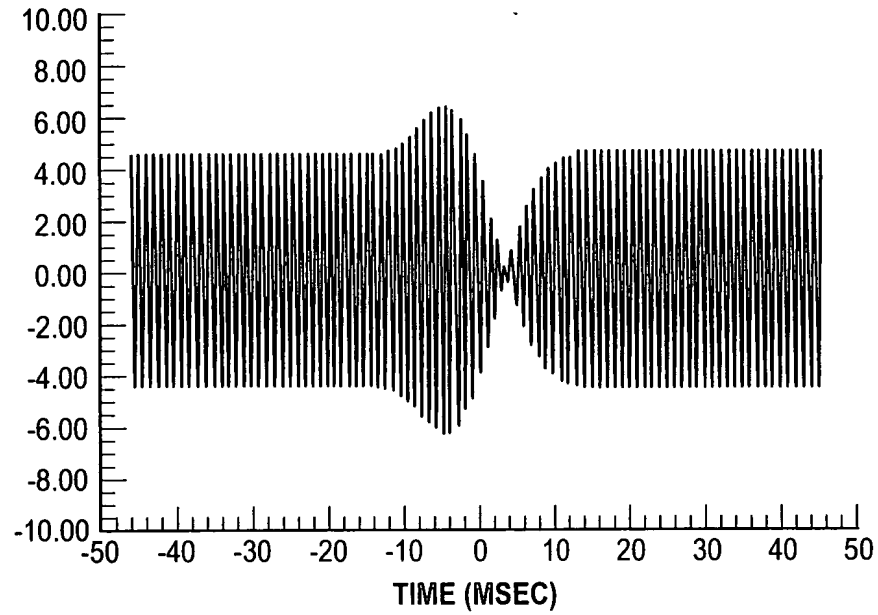
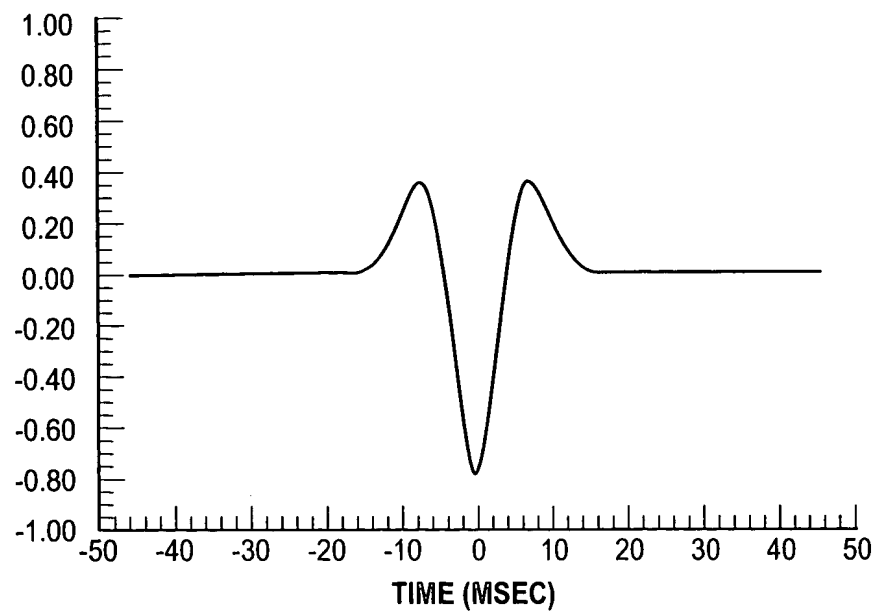


Fig. 17

DEMODULATED SOURCE LEVEL WAVEFORM



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Fig. 18

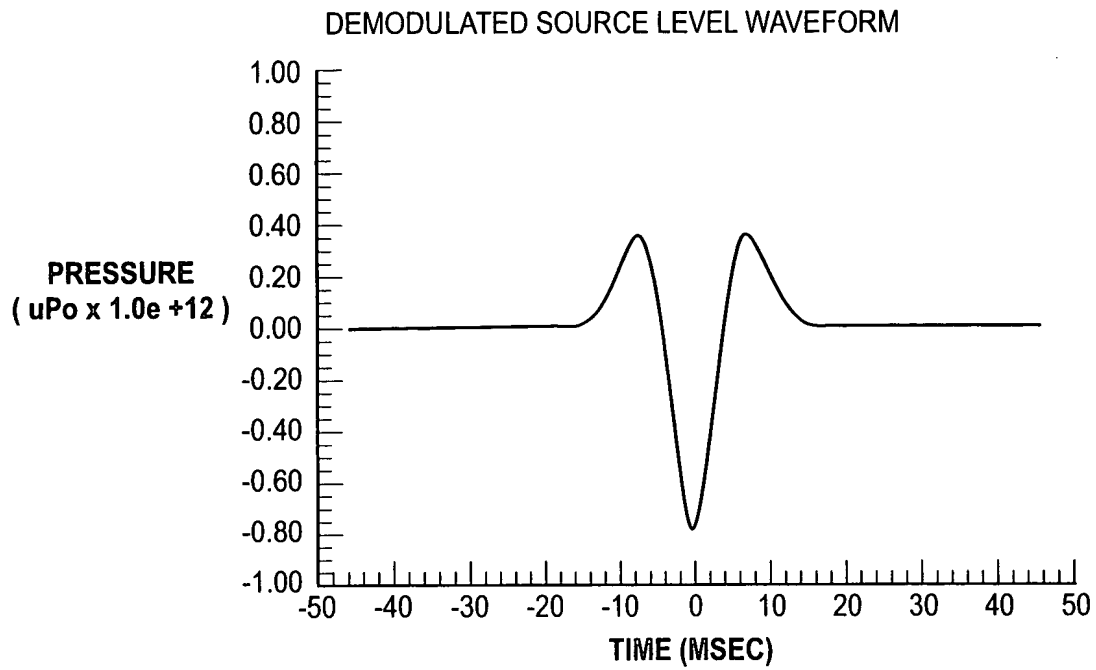
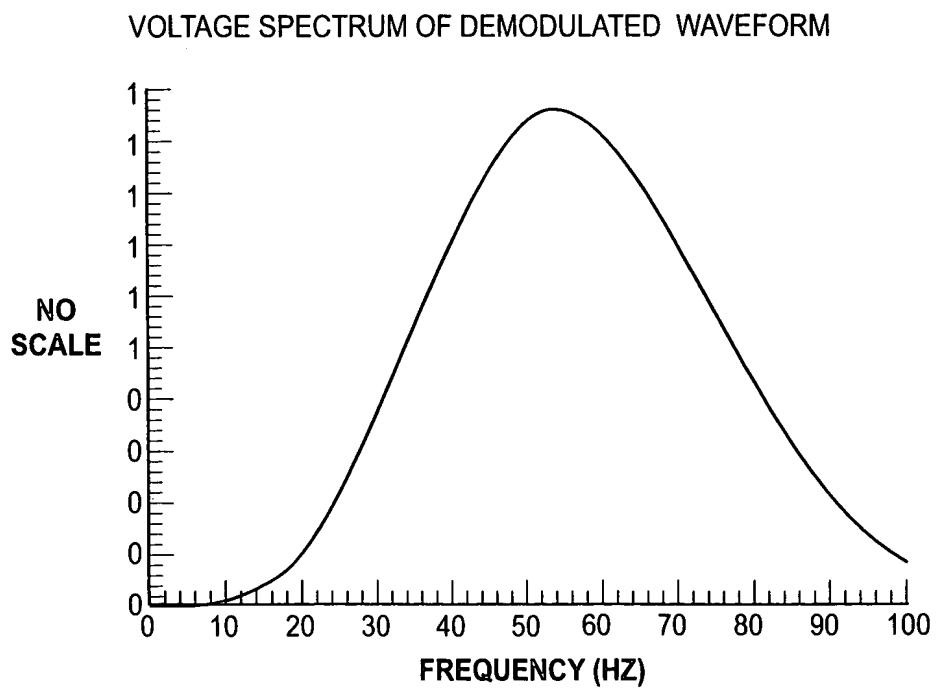


Fig. 19



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Fig. 20

TRANSMITTED WAVEFORM

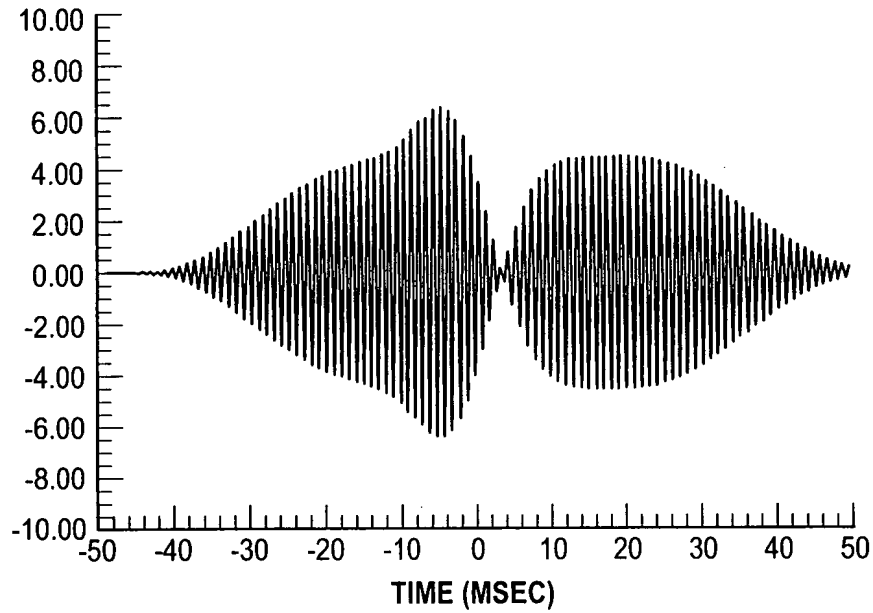
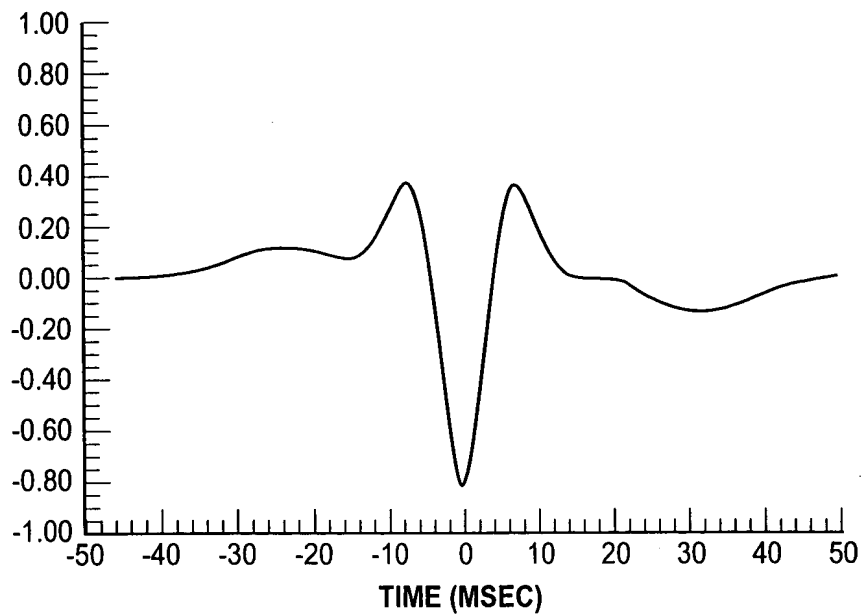


Fig. 21

DEMODULATED SOURCE LEVEL WAVEFORM



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Fig. 22

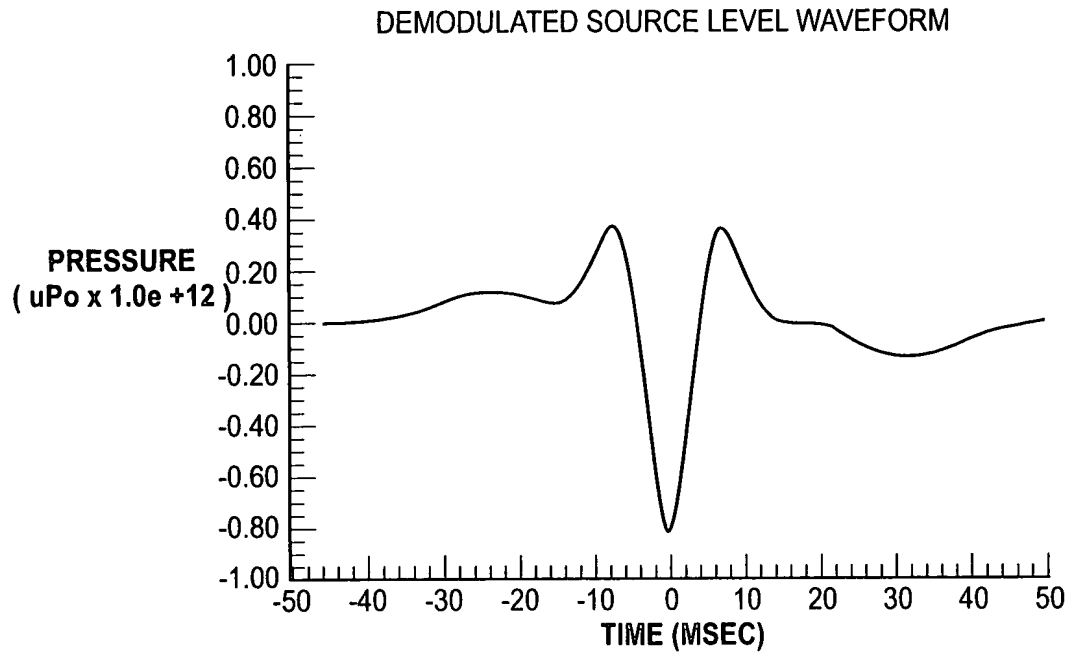
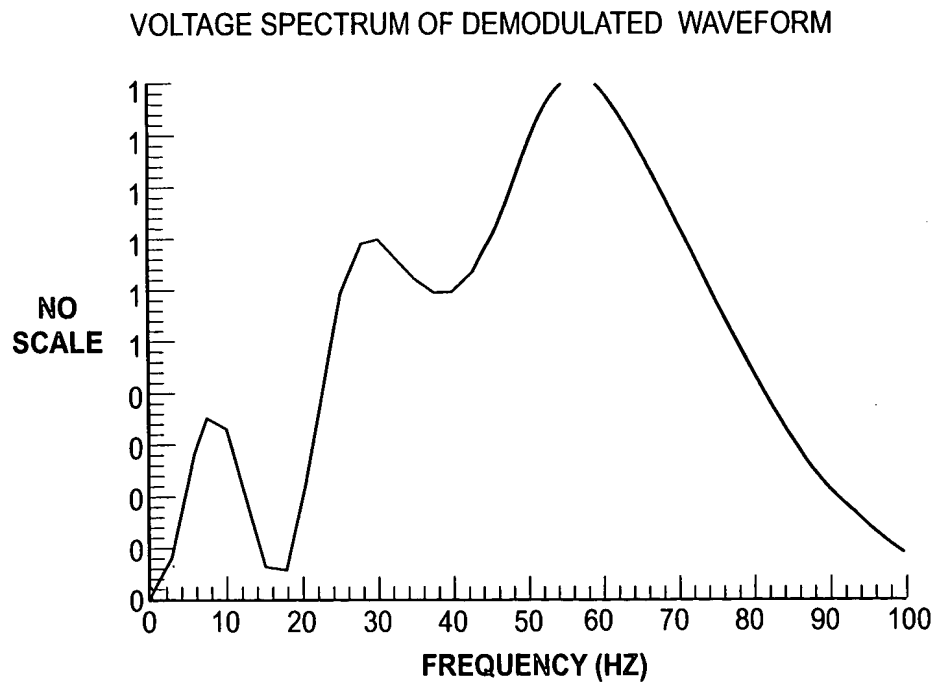


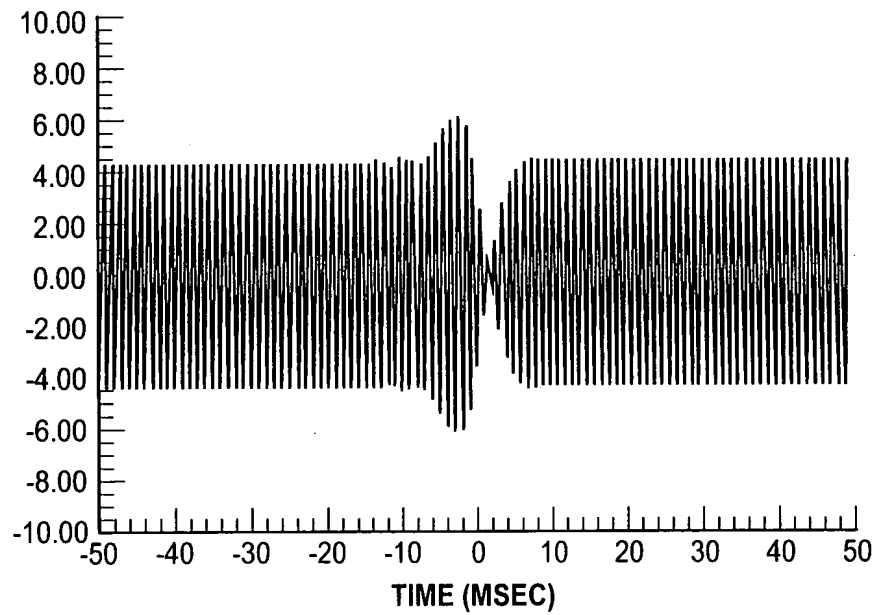
Fig. 23



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Fig. 24

TRANSMITTED WAVEFORM



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Fig. 25

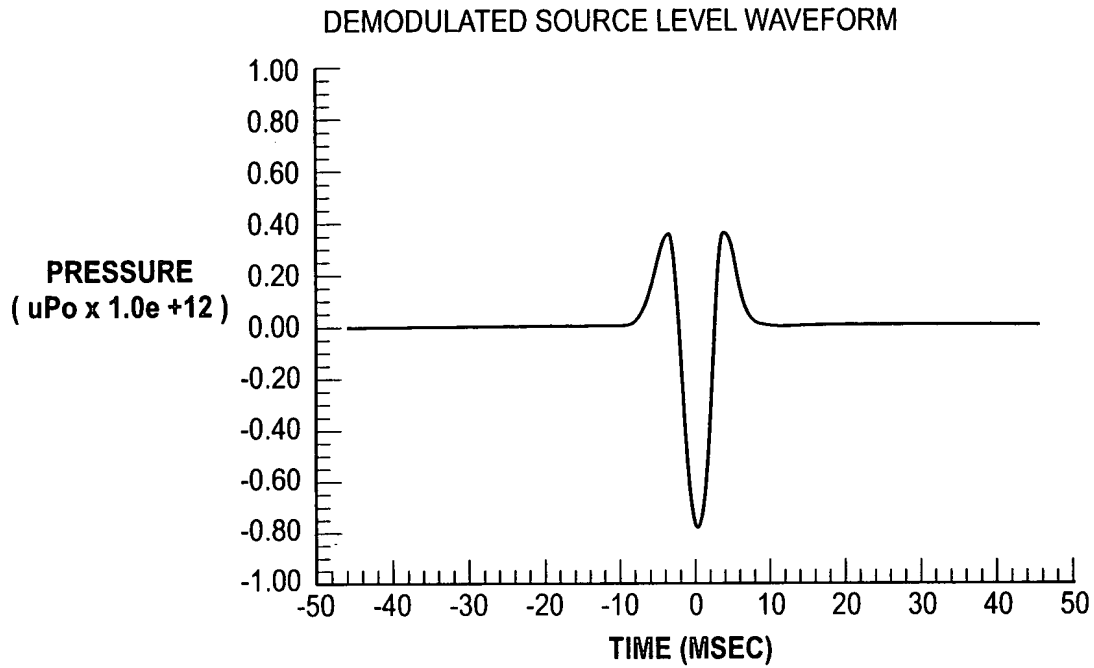
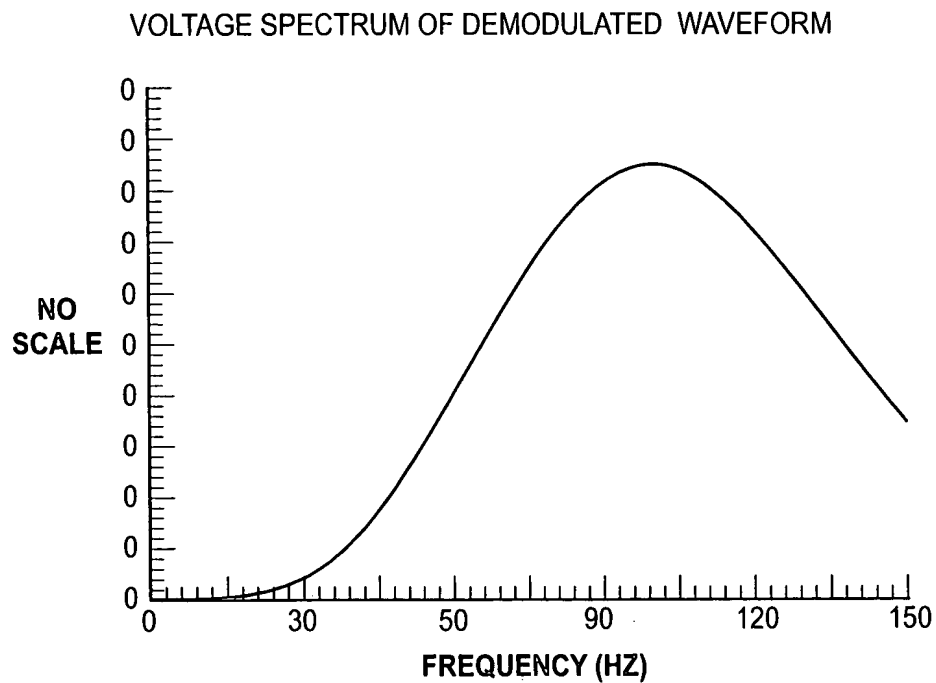
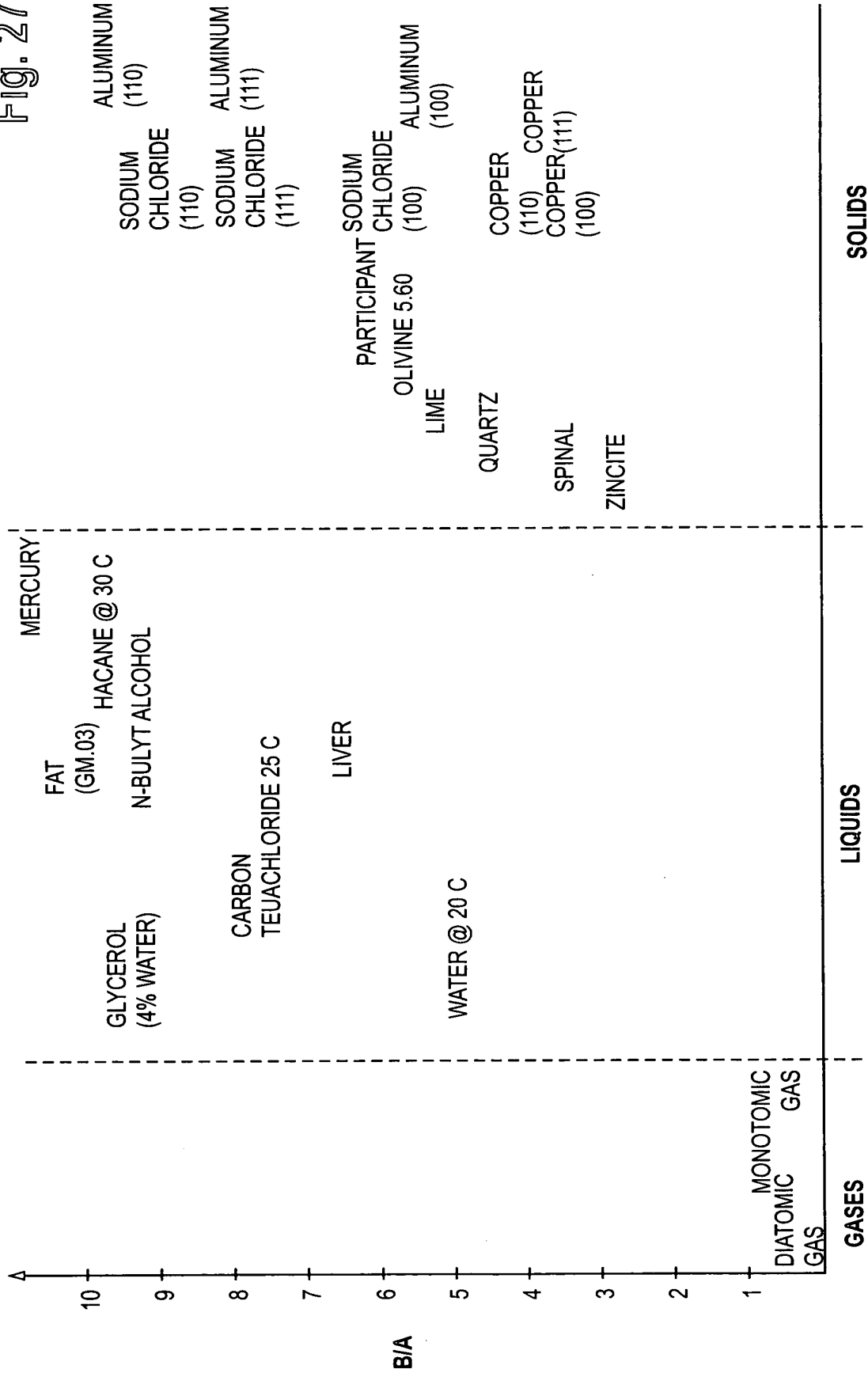


Fig. 26



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Fig. 27



TYPICAL B/A-PARAMETER RATIOS
FOR GASES, LIQUIDS AND SOLIDS

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Fig. 28

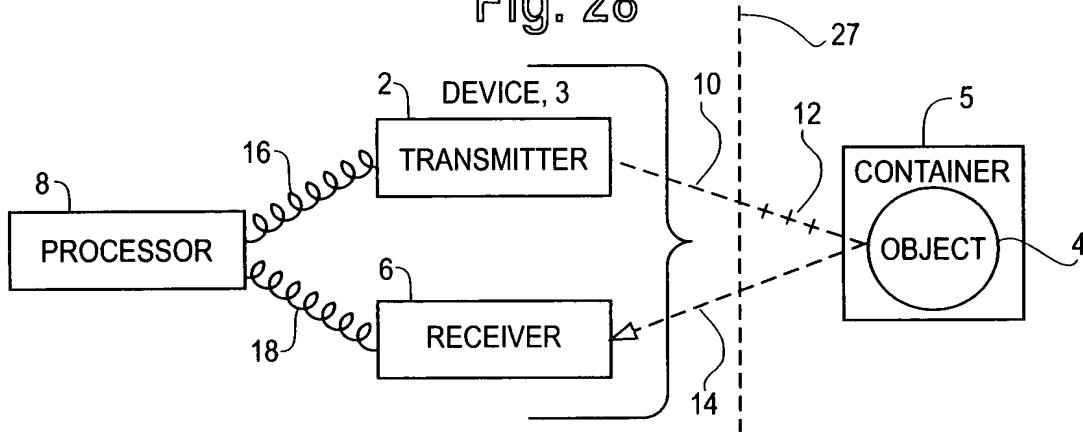


Fig. 29

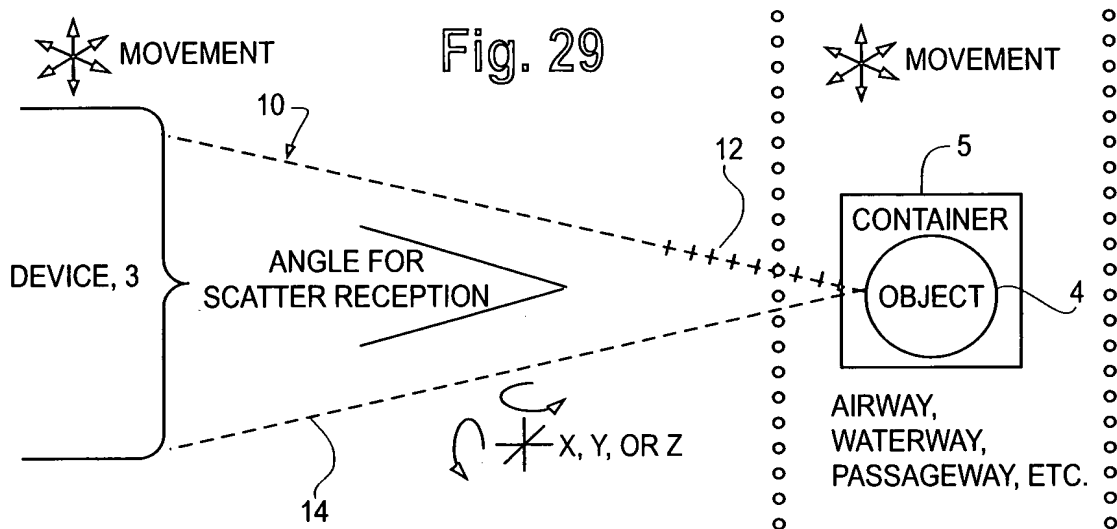


Fig. 30

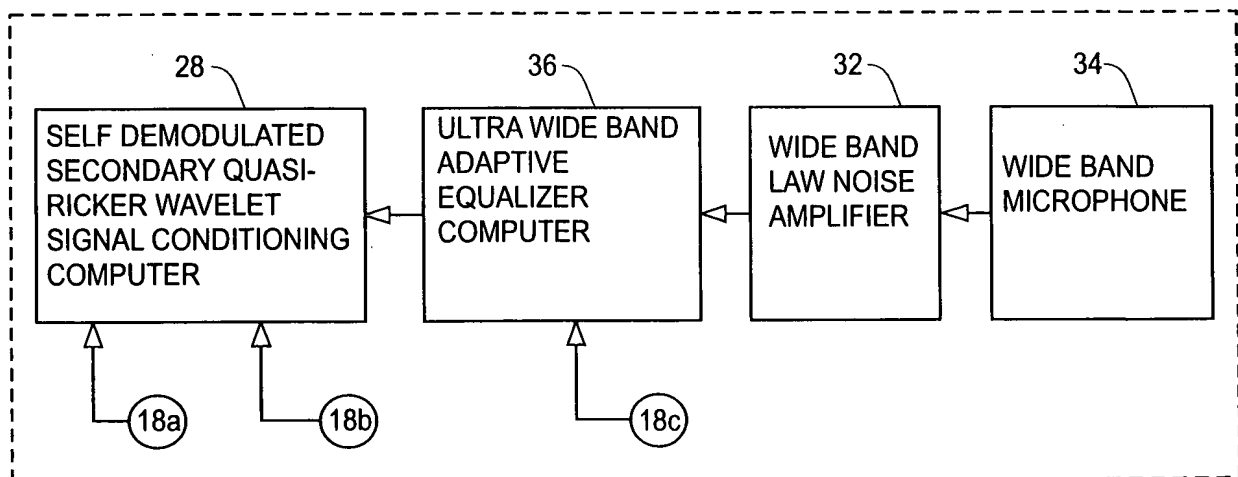


Fig. 31

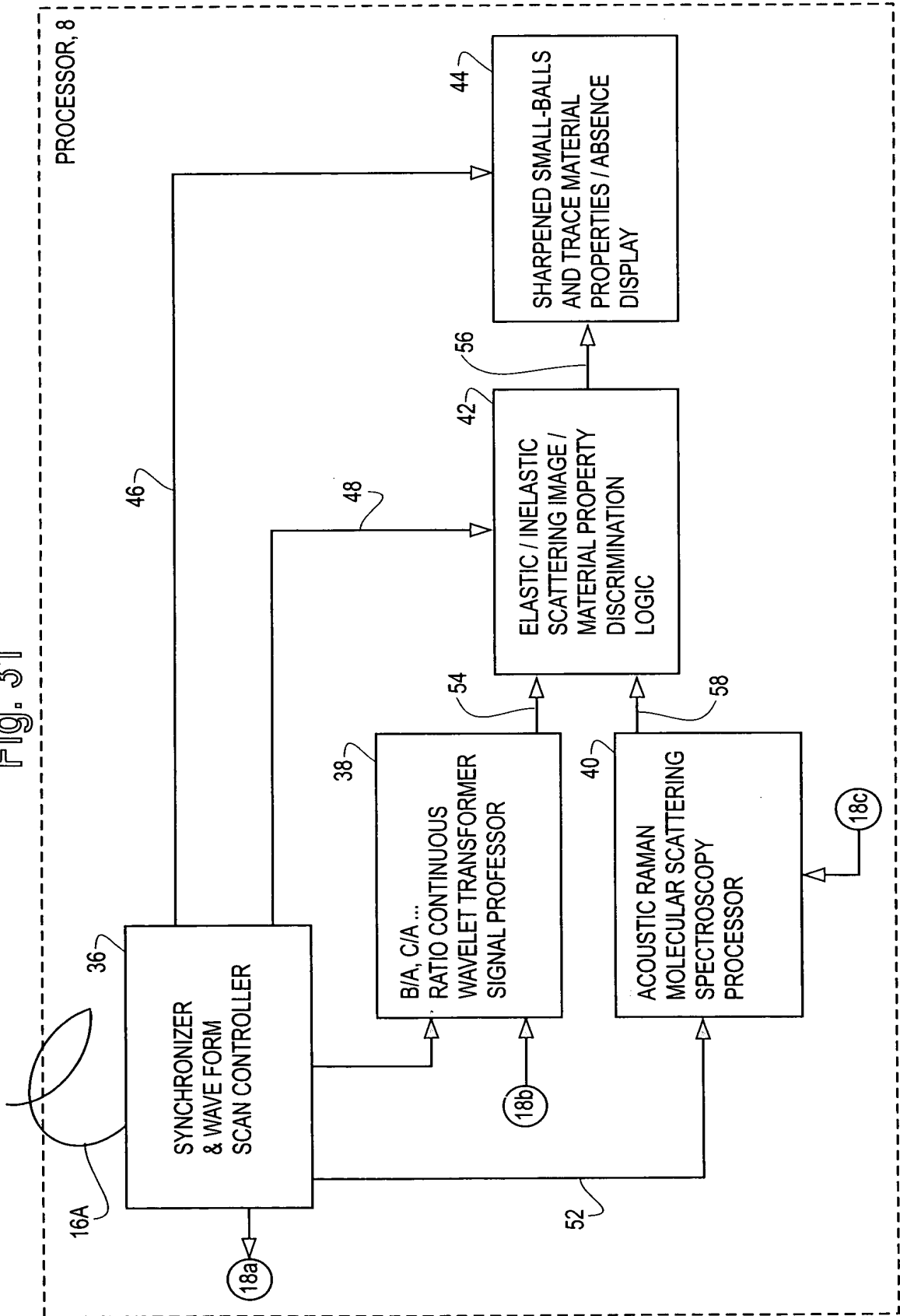
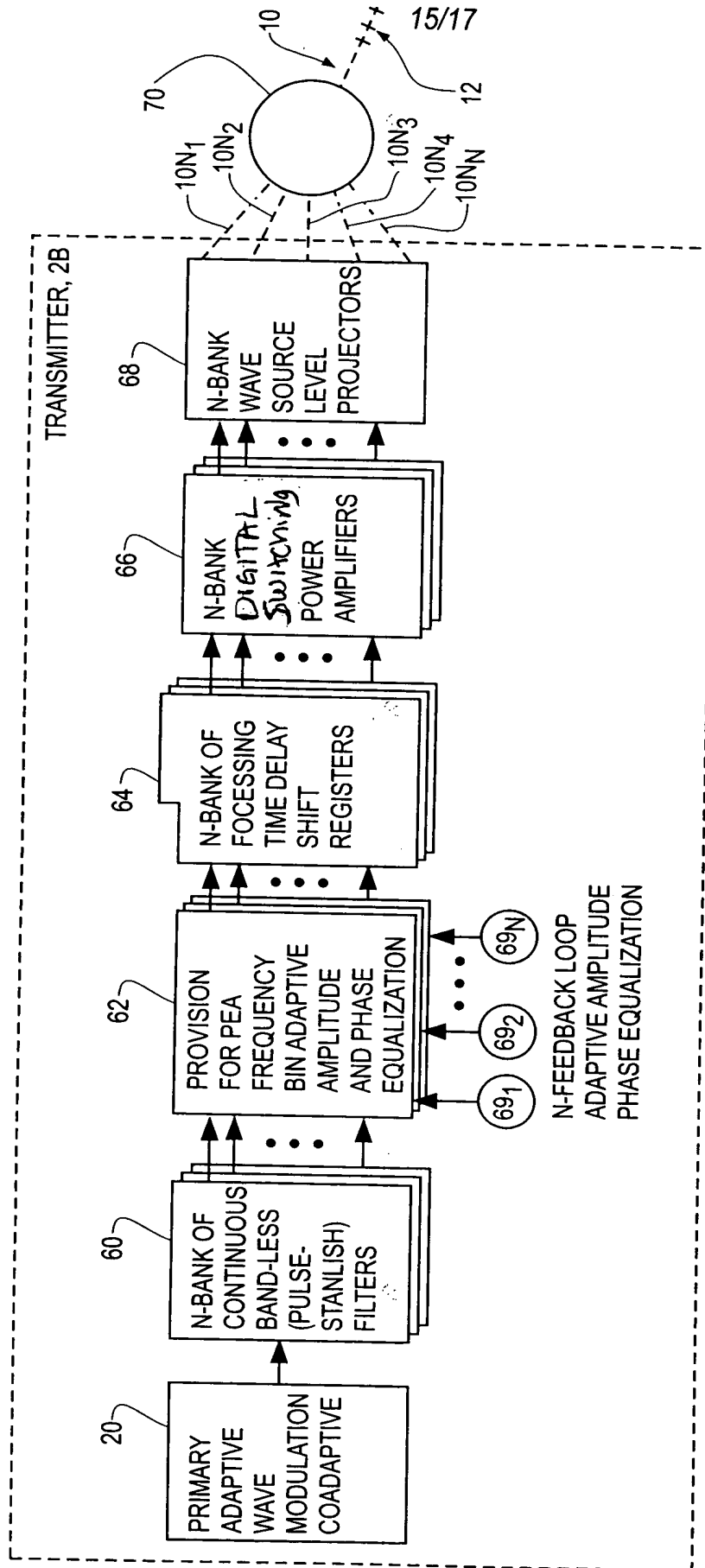


Fig. 32



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Fig. 33

FAR FIELD OF N-PROJECTOR ARRAY AND SECONDARY QUASI-RICKER WAVELET
FAR-FIELD NLS / SD INTERASDIGN

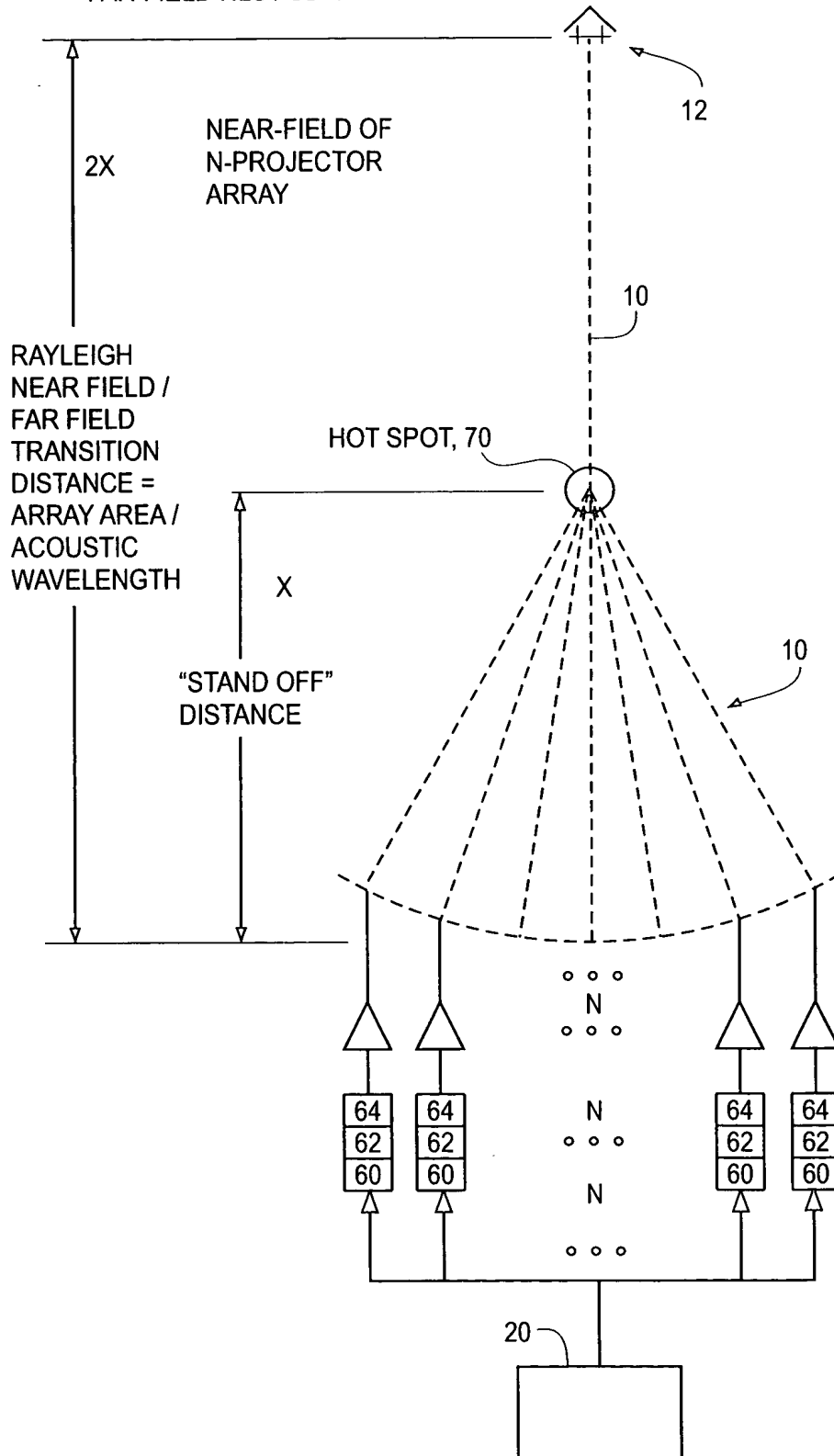


Fig. 34

